

Patent Application No. 09/681,643

REMARKS

This Amendment is in response to the Office Action dated January 21, 2005. In the Office Action, claims 1-10 and 17-21 were rejected under 35 USC §103. By this Amendment, claim 22 is added. Currently pending claims 1-10, and 17-22 are believed allowable, with claims 1 and 19 being independent claims.

CLAIM REJECTIONS UNDER 35 USC §103:

To establish a *prima facie* case of obviousness under 35 USC §103, the prior art references must teach or suggest all the claim limitations. See MPEP 2143 et seq.

Claim 1 was rejected under 35 USC §103 as obvious over U.S. Patent No. 6,072,193 to Ohnuma et al. ("Ohnuma") in view of U.S. Patent No. 6,066,519 to Gardner et al. ("Gardner").

Claim 1 recites, in part, "forming an oxide film on an inner wall of a CVD processing chamber . . . wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P."

The Office Action does not cite Gardner as teaching wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P, and the Applicant respectfully submits that Gardner does not teach or suggest such a limitation. The Office Action declares, however, Ohnuma teaches wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P. Office Action, page 3. Nevertheless, the Office Action states "Ohnuma fails to disclose forming an oxide film on an inner wall of a CVD processing chamber." Id.

The Applicant respectfully submits that Ohnuma does not teach or suggest wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P. As recognized in the Office Action, Ohnuma fails to disclose forming an oxide film on an inner wall of a CVD processing chamber. Therefore, Ohnuma cannot possibly teach forming an oxide film on the an inner wall of the CVD chamber before doping the source and drain electrodes with P, if it

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does not teach forming an oxide film on an inner wall of a CVD processing chamber in the first place.

The Office Action also cites Gardner as teaching forming an oxide film on an inner wall of a CVD processing chamber at column 6, lines 8-14. Office Action, page 3. Gardner discloses, "The chamber may be cleaned by, for example, increasing the flow of NF_3 through the chamber in order to remove any residual oxide on the showerhead and/or chamber walls." Gardner, column 6, lines 10-13. It is respectfully submitted that Gardner does not teach forming an oxide film on an inner wall of a CVD processing chamber, but rather removing an oxide layer on chamber walls that may have formed as a byproduct of substrate processing. Such a teaching cannot be equated to the limitation of forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P, as recited in claim 1.

Thus, for at least these reasons, it is respectfully submitted that the cited references do not teach or suggest all the limitations of claim 1. Furthermore, claim 1 is believed to be allowable and such allowance is earnestly solicited.

Additionally, to establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See MPEP 2143 et seq. The motivation or suggestion must be found in the prior art, not in the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). In rejecting claim 1 under 35 USC §103, it is respectfully submitted that the Office Action provides no evidence showing a motivation to combine the teachings of Ohnuma and Gardner. Thus, for at least this reason, it is respectfully submitted that a *prima facie* case of obviousness has not established rejection for claim 1.

Claims 2-10, 17, 18 and 22 are dependent on and further limit claim 1. Since claim 1 is believed allowable, claims 2-10, 17, 18 and 22 are also believed allowable for at least the same reasons as claim 1.

Claim 19 stands rejected under 35 USC §103 as obvious over Ohnuma in view of Gardner. Claim 19 recites, in part, "forming an oxide film on an inner wall of a CVD processing chamber . . . wherein forming the oxide film

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on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P."

The Office Action does not cite Gardner as teaching wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P, and the Applicant respectfully submits that Gardner does not teach or suggest such a limitation. The Office Action states, however, Ohnuma teaches "the gate oxide is formed before doping the source and drain electrodes with P (phosphorus)." Office Action, page 6. Nevertheless, the Office Action states "Ohnuma fails to disclose forming an oxide film on an inner wall of a CVD processing chamber." Office Action, page 3.

The Applicant respectfully submits that Ohnuma does not teach or suggest wherein forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P. As recognized in the Office Action, Ohnuma fails to disclose forming an oxide film on an inner wall of a CVD processing chamber. Therefore, Ohnuma cannot possibly teach forming an oxide film on the an inner wall of the CVD chamber before doping the source and drain electrodes with P, if it does not teach forming an oxide film on an inner wall of a CVD processing chamber in the first place.

The Office Action cites Gardner as teaching forming an oxide film on an inner wall of a CVD processing chamber at column 6, lines 8-14. Office Action, page 6. Gardner discloses, "The chamber may be cleaned by, for example, increasing the flow of NF_3 through the chamber in order to remove any residual oxide on the showerhead and/or chamber walls." Gardner, column 6, lines 10-13. It is respectfully submitted that Gardner does not teach forming an oxide film on an inner wall of a CVD processing chamber, but rather removing an oxide layer on chamber walls that may have formed as a byproduct of substrate processing. Such a teaching cannot be equated to the limitation of forming the oxide film on the inner wall of the CVD processing chamber is performed before doping the source and drain electrodes with P, as recited in claim 19.

Thus, for at least these reasons, it is respectfully submitted that the cited references do not teach or suggest all the limitations of claim 19. Furthermore, claim 19 is believed to be allowable and such allowance is earnestly solicited.

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Additionally, it is respectfully submitted that the Office Action contains no evidence showing a motivation to combine the teachings of Ohnuma and Gardner. Thus, for at least this reason, it is respectfully submitted that a *prima facie* case of obviousness has not established rejection for claim 19.

Claims 20 and 21 are dependent on and further limit claim 19. Since claim 19 is believed allowable, claims 20 and 21 are also believed allowable for at least the same reasons as claim 19.

NEW CLAIM:

Claim 22 is added by this Amendment, with claim 22 being depending on claim 1. No new matter is introduced by claim 22 and support for the limitations of claim 22 can be found at least at page 5, lines 6-23 and Fig. 2.


CONCLUSION

In view of the forgoing remarks, it is respectfully submitted that this case is in condition for allowance and such action is respectfully requested. If any points remain at issue that the Examiner feels could best be resolved by a telephone interview, the Examiner is urged to contact the attorney below.

No fee is believed due with this Response, however, should a fee be required please charge Deposit Account 50-0510. Should any extensions of time be required, please consider this a petition thereof and charge Deposit Account 50-0510 the required fee.

Respectfully submitted,

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